

IN THE SPECIFICATION:

Please replace paragraph number [0001] with the following rewritten paragraph:

[0001] This application is a continuation of application Serial No. 10/212,892, filed August 5, 2002, ~~pending~~ now U.S. Patent 6,596,651, issued July 22, 2003, which is a continuation of application Serial No. 09/798,445, filed March 2, 2001, pending, which is a divisional of application Serial No. 09/386,941, filed August 31, 1999, now U.S. Patent 6,291,364, issued September 18, 2001.

Please replace paragraph number [0007] with the following rewritten paragraph:

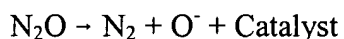
[0007] One method to provide the silicon dioxide film is to perform a high pressure chemical vapor deposition (~~HVCVD~~) (HPCVD) process step on the semiconductor device. The formation of the cell dielectric, as well as transistor gate oxides and reoxidation steps in other processing application steps, is subjected to high pressures in excess of one atmosphere, typically between five (5) atmospheres to twenty-five (25) atmospheres, where an atmosphere is represented as a pressure of 760 Torr. An atmosphere of pure N₂O is introduced under such pressures in a temperature range of 600°C. to 800°C. The desired reaction is:



This allows the oxygen to react with the silicon surface, forming the silicon dioxide layer.

Please replace paragraph number [0016] with the following rewritten paragraph:

[0016] Catalyst matrix liner 20, which is also shown in drawing FIG. 2, is comprised of a catalyzing agent that causes the N₂O gas in the furnace 10 to react to form the base components of nitrogen and oxygen of the N₂O gas according to the following reaction:

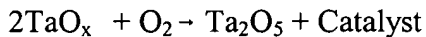


The use of ~~the~~ a catalyst constrains the chemical reaction from running away or becoming uncontrollable, which would cause a pressure and temperature surge within the furnace 10. Such

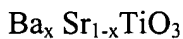
surges must be avoided as they destroy the semiconductor materials under fabrication within the furnace 10 as well as causing the possible destruction of the furnace tube 12.

Please replace paragraph number [0017] with the following rewritten paragraph:

[0017] Catalyst materials are selected from the group consisting of Palladium, Platinum, Iridium, Rhodium, Nickel, and Silver. Gold also can be used as a catalyst, but should be avoided as gold contaminates the silicon used in the wafers on which semiconductor devices are formed. Additional catalysts include perovskites, CaTiO_3 , a natural or synthetic crystalline mineral composed of calcium dioxide and titanium dioxide. When using a Tantalum compound to form the gate oxide or the cell dielectric for the transistors of a semiconductor device, a tantalum oxide is produced in the N_2O atmosphere in the furnace 10. The oxygen from the N_2O combines with the tantalum oxide according to the following reaction:



The use of the catalyst material helps to drive this reaction nearly to full stoichiometry. When used with ~~the a~~ a the Barium Strontium Titanate compound, the catalyst allows the oxidation to produce:



which is driven to full a stoichiometry reaction as well.